

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
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In the Matter of

Amendment of the Commission's Rules
Regarding Multiple Address Systems

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WT Docket No. 97-81

To: The Commission

COMMENTS OF THE AFFILIATED AMERICAN RAILROADS

The Affiliated American Railroads^{1/} by their undersigned counsel, hereby submit their Comments in response to the Notice of Proposed Rule Making ("NPRM") in the above-captioned proceeding.^{2/}

The railroad industry employs MAS spectrum for a variety of fixed point-to-multipoint applications which are integral for train control communications. The railroads' MAS systems are the "last mile" of the RF networks that are used exclusively for the railroads' internal, private use to ensure the safe operation of the nations' railroads. Typically, the MAS links serve as the terminus at trackside locations of the centralized-train-control (CTC) and computer-aided-dispatch (CAD) systems that control train operations. They represent the RF "connection" between the railroads' computerized control centers and the switch and signal units at trackside and rail yard locations. A

1/ The Affiliated American Railroads consist of four Class I railroads operating in the U.S. and Canada: Canadian National, Conrail, CSX and Union Pacific.

2/ Amendment of the Commission's Rules Regarding Multiple Address Systems, Notice of Proposed Rule Making, WT Docket No. 97-81, FCC 97-58 (released February 27, 1997)("NPRM").

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typical railroad MAS link will control approximately 5-7 train operation sites; control of as many as 30 sites is possible from MAS transmitters at high elevations.

Currently, MAS systems are licensed on a site-by-site basis, upon application to the Commission, subject to certain operational rules such as standard mileage separation requirements and frequency separation requirements. In the NPRM, the Commission inquired as to whether it should create a separate allocation for private users of the MAS bands and whether it should impose a geographic licensing plan on MAS bands currently used for the private, internal communications needs of licensees. For the reasons described below, the railroads urge the Commission to create a purely private allocation and not to adopt a geographic licensing plan for these private use bands.

I. The Commission Should Create an Exclusively Private MAS Allocation

In the NPRM, the Commission noted that licensees in the 928/952/956 MHz bands appear to be using their MAS spectrum overwhelmingly for private service.^{3/} The Commission tentatively concluded, therefore, that the 928/952/956 MHz bands should be designated exclusively for private, internal use. The Commission also sought comment on whether the existing or projected internal communications requirements of private service users justify the creation of a purely private allocation.

The railroads urge the Commission to create a private allocation. The communications needs of the railroad industry are constantly expanding as safety and operational functions are automated to increase the efficiency and safety of railroad

3/ NPRM, ¶ 12.

operations. The railroad industry employs a wide variety of wireless communications systems to handle these increased demands. These systems, including the railroads' MAS systems, operate at or near capacity in many areas of the country. This projected increase in the need for MAS frequencies by the railroads, coupled with the railroads' already extensive existing use of MAS frequencies, dictates that the Commission should create a purely private MAS allocation.

II. The Commission Should not Adopt Geographic Licensing for MAS Bands used for Licensees' Private, Internal Communications

Although it recognized the internal, private nature of the use of MAS spectrum in the 928/952/956 MHz bands, the Commission nonetheless asked for comment on whether geographic licensing should be employed for these bands if it finds that the principal use of these bands involves, or is reasonably likely to involve, subscriber-based service. The railroad industry urges the Commission to reject geographic licensing for MAS bands used for private communications needs and submits that the Commission's inquiry into the use of these bands is unnecessary in light of its conclusion in the NPRM that licenses in the 928/952/956 MHz bands are used "overwhelmingly" for private, internal communications needs. The Commission noted that geographic area licenses are appropriate where licensees provide, or are likely to provide, subscriber-based services. This is because these subscriber-based services produce revenue for the licensees, which will allow them to obtain these geographic based licenses via auction. In contrast to subscriber-based services, the use of MAS frequencies by private users such as railroads does not generate revenue which would enable these users to pay for

geographic licenses. In addition, private users require communications capabilities at specific sites where train operations are located -- they simply do not need geographic area licenses.

III. The Commission Must Ensure that MAS Bands used for Private, Internal Communications are not Awarded by Auction

The Commission proposed that competitive bidding be used as a means of awarding MAS licenses for those bands which it concludes are used, or will likely be used to provide subscriber-based services. These include the 932/941 and 928/959 MHz MAS bands. In discussing the use of auctions, the Commission again mentioned that it sought comment on how frequencies in the 928/952/956 MHz bands are currently being used by licensees. Again, the railroads note that the Commission stated in the NPRM that the use of the frequencies in these bands was "overwhelmingly" for private service. Having made this determination, the railroads urge the Commission to refrain from subjecting these bands to competitive bidding for the award of licenses. Auctions are clearly an inappropriate means of awarding licenses for the type of private, non-revenue producing safety and operational uses employed by railroads and other private users. Indeed, the Commission's own statement that these bands are "used overwhelmingly for private service" precludes the use of auctions, which may be employed only where "the principal use of the spectrum will involve, or is reasonably likely to involve, the receipt by the licensee of compensation from subscribers."^{4/}

^{4/} 47 U.S.C. § 309(j)(2)(a).

IV. Incumbent Licensees Must be Permitted to Expand Their MAS Systems Without Undue Restraint

In the NPRM, the Commission recognized that it must assess the impact that its geographic licensing proposal would have on incumbent licensees which are licensed on a site-by-site basis.^{5/} The Commission noted that it was concerned with the effect of the proposal on those licensees in the 928/952/956 bands which use their MAS systems for private, internal communications needs and concluded that, in the event it adopts a geographic licensing approach for these bands, it would allow incumbent licensees to continue operating under their current authorization.^{6/} Under the Commission's proposal, new geographic licensees would be required to provide protection to all co-channel incumbent systems that are constructed and operating within their geographic license area. The railroads support these proposals as they provide needed protection to incumbent licensees.

The railroads are concerned, however, that the Commission's proposals concerning an incumbent licensee's ability to obtain additional licenses will unduly restrict the incumbent's ability to expand its system in response to the anticipated need for additional MAS spectrum discussed above. The Commission proposed to allow incumbents to "modify or augment their systems as long as they do not encroach on co-channel operations of a geographic licensee."^{7/} Further, the Commission stated that

5/ NPRM, ¶ 19.

6/ Id. As stated in these Comments (supra at 3), the Affiliated American Railroads oppose the adoption of a geographic licensing approach for these bands.

7/ NPRM, ¶ 19.

incumbents could not expand their existing systems without the consent of the geographic licensee.^{8/} To ensure that incumbents are afforded adequate protection, the Commission proposed a protected service area of 25 miles for incumbents' operations. This may not be enough. Some railroad MAS systems provide coverage to train operation locations as far as 40 miles away from the MAS transmitter. Accordingly, the railroads recommend a 40 mile protection area.

Within the 25-mile service area, the Commission proposed to allow incumbents freely to modify existing systems or to add new radio transmitters as long as the signal level is not increased beyond this 25 mile area. If an incumbent wishes to apply for a new license which would result in an increase in the signal level of its MAS system beyond the existing 25 mile service area, the incumbent would have to obtain the permission of the geographic licensee in that area. Such a requirement will act to severely constrain the ability of incumbent licensees to expand their current MAS systems to meet legitimate operational needs that inevitably will arise in the future. In this regard, it is important to note that the railroad industry's deployment of MAS facilities is not complete. As capital budgets permit, the reach of CTC and CAD systems is continuously being expanded to encompass new areas of railroad right-of-way. Furthermore, expansion of rail service into new geographic areas is often necessary to accommodate commercial growth and industrial expansion. The construction of a new automobile plant at a location previously without rail service necessitates the construction of rail infrastructure to support the new economic activity. Obviously, that new rail infrastructure is not as productive without the

8/ Id., ¶ 20.

necessary RF control links to support it, including MAS links. Accordingly, the Commission should allow for expansion of MAS links into new geographic areas to accompany the expansion of the underlying infrastructure that is supported by the MAS systems.

In addition, high speed rail operations in heavily populated rail corridors such as the corridor between Portland, Oregon and Seattle, Washington, are currently being investigated by the Federal Railroad Administration ("FRA"). These areas will require special attention for wayside operations and for supporting communications links, further increasing the railroads' need for MAS spectrum.

V. Conclusion

For the foregoing reasons, the railroad urges the Commission to adopt the suggestions made herein.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I, Chotima Harris, hereby certify that on this 1st day of May, 1997, copies of the foregoing "Comments of the Affiliated American Railroads" were mailed, first class postage prepaid on this 1st day of May to the following:

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